## **ABSTRACT**

An image sensing module capable of fast transferring signal and a method thereof are proposed. The image sensing module comprises an optical sensor set, a plurality of readout circuits and a plurality of amplifying circuits. Each readout circuit has a plurality of input terminals and an output terminal. Each amplifying circuit has an input terminal and an output terminal. The input terminals of each readout circuit are connected with the optical sensor set. The output terminal of each readout circuit is connected to the input terminal of one of the amplifying circuits. These readout circuits simultaneously capture output signals of the optical sensor set and then transfer to corresponding amplifying circuits in a parallel way. These amplifying circuits then output the amplified signals one by one in an orderly and time-sharing way to accomplish quick transmission of signals of the image sensing module.

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